

Quantitative Usage Analysis for Etridiazole

Case Number: 0009

PC Code: 84701

Date: June 15, 1999

Analyst: Steven M. Nako

Etridiazole Use: Food Crops

Total average annual use of etridiazole is estimated at approximately 75,000 pounds of active ingredient (lbs ai). Cotton is the primarily agricultural use site. About 42,500 lbs ai of etridiazole is applied to cotton; with typical application rates at about 0.17 lbs ai/acre. Etridiazole is also registered for use as a seed treatment on citrus trees, beans/peas, peanuts corn, safflower, sorghum, soybeans and wheat; of these crops, peanuts appears to have received a modest amount of treatments with etridiazole.

Etridiazole Use: Non-Food Crops/Sites

Etridiazole is also applied to various ornamental plants and shrubs by horticultural nurseries. About 28,000 lbs ai of etridiazole are believed to be applied by nurseries; mainly to control for root diseases (USDA, NAPIAP Report, 1-CA-96). About 5,000 lbs ai of etridiazole are also applied to golf courses.

Etridiazole Use on Imports: Fresh & Processed Tomatoes, Coffee

Etridiazole is also registered for use on tomatoes and coffee abroad. About 32% of the **fresh** tomatoes consumed in the US is imported. /1 Most of the fresh tomato imports come from Mexico (28.5% of the 32%), where etridiazole is not applied. After reviewing these data, I calculated that less than 1% of all fresh tomatoes consumed in the US were treated with etridiazole. For processed tomato products (canned, paste, sauces, juice, etc.), Italy is the primary source country; and about 1% of the acres planted to tomatoes in Italy are treated with etridiazole. But since most (98%) of the processed tomato products consumed in the US are produced domestically; I calculated that less than 1% of all processed tomato products consumed in the US were treated with etridiazole. Similar calculations were made for coffee.

/1 For illustration, the following are calculations on the percent of fresh tomatoes consumed in the US that was treated with etridiazole (1997): $32\% = \text{US Imports} / \text{Total US Consumption} = 1,635 / (1,635 + 3,780 - 341)$; Total US Imports = 1,635 Million Lbs, Total US production = 3,780 Mil. Lbs, and Total US Exports = 341 Mil. Lbs. This total amounts to about 16 lbs of fresh tomatoes (disappearance) per person.

Etridiazole	Case #:	0009	AI #:	84701	Analyst:		Steven M. Nako			June 15, 1999	
Site \1	Acres Grown (000)	Acres Treated (000)		% of Crop Treated		LB AI Applied (000)		Average Application Rate			States of Most Usage
		Wtd Avg	Est Max	Wtd Avg	Est Max	Wtd Avg	Est Max	lb ai/ acre/yr	#appl / yr	lb ai/ A/appl	(% of total lb ai used on this site)
Cotton	12,000	250	500	2.1%	4.2%	43	85.0	0.17	1.00	0.17	MS AR LA TN NC 82%
Seed Treatments (Historical Use): \2											
Grapefruit	194	0	<1	0.0%	<1%	0	<1	0.20	1.00	0.20	FL 100%
Lemons	63	0	<1	0.0%	<1%	0	<1	0.50	1.00	0.50	FL 100%
Oranges	867	0	<1	0.0%	<1%	0	<1	0.50	1.00	0.50	FL 100%
Citrus, Other	51	0	<1	0.2%	<1%	0	<1	0.50	1.00	0.50	FL 100%
Beans/Peas	2,181	0	<1	0.0%	<1%	0	<1	0.16	1.00	0.16	MI 100%
Corn	72,284	8	34	0.0%	<1%	1	6	0.17	1.00	0.17	MI SC 84%
Peanuts	1,610	5	32	0.3%	2.0%	5	17	1.03	1.13	0.92	AL GA NC TX 86%
Safflower (Other Crops)	2,515	1	5	0.0%	<1%	0	1	0.20	1.00	0.20	MT NE 100%
Sorghum	11,280	0	<1	0.0%	<1%	0	<1	0.15	1.00	0.15	
Soybeans	62,879	10	20	0.0%	<1%	2	4	0.20	1.00	0.20	AR MS TN 88%
Wheat, Winter	45,854	0	<1	0.0%	<1%	0	<1	0.15	1.00	0.15	
Non-Agricultural Uses: \3											
Golf Courses	1,400	41	60	2.9%	4.3%	5	8	0.13	1.00	0.13	
Nursery & Greenhouse Ornamentals:											
Container Ornamentals	160	1	2	0.9%	1.2%	22	28	14.57	10.00	1.46	
Greenhouse	11	2	2	14.3%	18.4%	6	8	3.79	6.05	0.63	
Total		294	429			75	102				
Import Tolerances: \4				-- % US Consumption --							Countries w/most Use
Tomatoes, Fresh				0.0%	<1%						Italy
Tomatoes, Processed				0.1%	<1%						Italy
Coffee				0.0%	<1%						Costa Rica

- - PLEASE SEE NOTES TO TABLE: NEXT PAGE - -

COLUMN HEADINGS

Wtd Avg = Weighted average--the most recent years and more reliable data are weighted more heavily.

Est Max = Estimated maximum, which is estimated from available data.

Average application rates are calculated from the weighted averages.

CROP GROUPS

Citrus, Other includes kumquats, limes, tangelos, and tangerines.

Other Crops include ornamentals, popcorn, rapeseed/canola, and safflower.

NOTES ON TABLE DATA

Usage data primarily covers 1987 - 1996.

Calculations of the above numbers may not appear to agree because they are displayed as rounded to the nearest 1000 for acres treated or lb. a.i.

(Therefore 0 = < 500), or to the nearest whole percentage point for % of crop treated. (Therefore 0% = < 0.5%)

0* = Available EPA sources indicate that no usage is observed in the reported data for this site, which implies that there is little or no usage.

(-) = Indicates that information on this site is NOT available in EPA sources or is insufficient.

\1 SOURCES: Various EPA data sources, USDA\NASS Agricultural Chemical Usage, and National Center for Food and Agricultural Policy, Doane Marketing Research Inc..

\2 The pesticide use estimates for other crops (besides cotton) are generally seed treatments. According to the primary registrant, these products are no longer actively marketed.

\3 The calculated %CT estimates are calculated based on estimates of total pounds applied by this industry. Source: USDA NAPIAP (1-CA-96): Garber, M.P., et. al.: 'Biological and Economic Assessment of Pest Management in the United States Greenhouse and Nursery Industry, U. of Georgia, Cooperative Extension Service, Kline, SRI Greenhouse & Nursery Report.

\4 The %CT estimates for imported tomatoes and coffee are based on a weighted average of %CT from the source countries; where weight=share of imports. For example, since etridiazole is not applied to Mexican tomatoes, the overall contribution from Mexican imports is 0 (=28% Share of US Consumption x 0 %CT). Sources: USDA, ERS Foreign Agricultural Trade in the US (FATUS, 1997), USDA, NASS Agricultural Statistics, 1998; Produce Studies.